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717.20 Topsoil handling and revegetation.

AUTHORITY: Secs. 201 and 501, Pub. L. 95-87, 91 Stat. 445 (30 U.S.C. 1201).

SOURCE: 42 FR 62695, Dec. 13, 1977, unless otherwise noted.

§717.10 Information collection.

The Office of Management and Budget has determined that the information collection requirements contained in 30 CFR part 717 do not require approval under the Paperwork Reduction Act.

[59 FR 43420, Aug. 23, 1994]

§717.11 General obligations.

- (a) Compliance. All underground coal mining and associated reclamation operations conducted on lands where any element of the operations is regulated by a State shall comply with the initial performance standards of this part according to the time schedule specified in §710.11.
- (1) For the purposes of this part, underground coal mining and associated reclamation operations mean a combination of surface operations and underground operations. Surface operations include construction, use, and reclamation of new and existing access and haul roads, aboveground repair areas, storage areas, processing areas, shipping areas, and areas upon which are sited support facilities including hoist and ventilating ducts, and on which materials incident to underground mining operations are placed. Underground operations include underground construction, operation, and reclamation of shafts, adits, underground support facilities, underground mining, hauling, storage, and blasting.
- (2) For the purpose of this part the term *permittee* means the person permitted to conduct underground mining operations by a State or if no permit is issued in the State, the person operating a mine.
- (3) For the purpose of this part, *Disturbed areas* means surface work areas and lands affected by surface operations including, but not limited to, roads, mine entry excavations, above ground (surface) work areas, such as tipples, coal processing facilities and other operating facilities, waste work and spoil disposal areas, and mine waste impoundments or embankments.

- (4) Where State environmental protection standards are adopted for a specific State because they are more stringent than the standards of this part, they will be published in part 718 of this chapter.
- (b) *Authorizations to operate*. A copy of all current permits, licenses, approved plans or other authorizations to operate the mine shall be available for inspection at or near the mine site.

§717.12 Signs and markers.

- (a) Specifications. All signs required to be posted shall be of a standard design that can be seen and read easily and shall be made of durable material, and shall conform to local ordinances and codes. The signs and other markers shall be maintained during all operations to which they pertain.
- (b) Mine and permit identification signs. Signs identifying the mine area shall be displayed at all points of access to the permit area from public highways. Signs shall show the name, business address, and telephone number of the permittee and identification numbers of current mining and reclamation permits or other authorizations to operate. Such signs shall not be removed until after release of all bonds.

§717.13 [Reserved]

§717.14 Backfilling and grading of road cuts, mine entry area cuts, and other surface work areas.

(a) Upon completion of underground mining, surface work areas which are involved in excavation, disposal of materials, or otherwise affected, shall be regraded to approximate original contour. The permittee shall transport, backfill and compact fill material to assure stability or to prevent leaching of toxic pollutants. Barren rock or similar materials excess to the mining operations and which are disposed on the land surface shall be subject to the provision of §717.15 of this part. Roads and support facility areas existing prior to the effective date of this part and used in support of underground mining operations which are subject to this part shall be regraded to the extent deemed feasible by the regulatory authority based on the availability of backfill material and resulting stability of the affected lands after reclamation. As a minimum, the permittee shall be required to:

- (1) Retain all earth, rock and other mineral nonwaste materials on the solid portion of existing or new benches, except that the regulatory authority may permit placement of such material at the site of the faceup as a means of disposing of excavated spoil when additional working space is needed to facilitate operations. Such placement of material shall be limited to minimize disturbance of land and to the hydrologic balance. Such fills shall be stabilized with vegetation and shall achieve a minimum static safety factor of 1.5. In no case shall the outslope exceed the angle of repose.
- (2) Backfill and grade to the most moderate slope possible to eliminate any highwall along roads, mine entry faces or other areas. Slopes shall not exceed the angle of repose or such lesser slopes as required by the regulatory authority to maintain stability.
- (b) On approval by the regulatory authority and in order to conserve soil moisture, ensure stability, and control erosion on final graded slopes, cut-and-fill terraces may be allowed if the terraces are appropriate substitutes for construction of lower grades on the reclaimed lands. The terraces shall meet the following requirements:
- (1) The width of the individual terrace bench shall not exceed 20 feet unless specifically approved by the regulatory authority as necessary for stability erosion control, or roads.
- (2) The vertical distance between terraces shall be as specified by the regulatory authority to prevent excessive erosion and to provide long/term stability.
- (3) The slope of the terrace outslope shall not exceed 1v:2h (50 percent). Outslopes which exceed 1v:2h (50 percent) may be approved if they have a minimum static safety factor of 1.5 of more and provide adequate control over erosion and closely resemble the surface configuration of the land prior to mining. In no case may highwalls be left as part of terraces.
- (4) Culverts and underground rock drains shall be used on the terrace only

when approved by the regulatory authority.

- (c) All surface operations on steep slopes of 20 degrees or more or on such lesser slopes as the regulatory authority define as a *steep slope* shall be conducted so as not to place any material on the downslope below road cuts, mine working or other benches, other than in conformance with paragraph (a)(1) of this part.
- (d) Regrading or stabilizing rills and gullies. When rills or gullies deeper than 9 inches form in areas tht have been regraded and the topsoil replaced but vegetation has not yet been established, the permittee shall fill, grade, or otherwise stabilize the rills and gullies and reseed or replant the areas according to §717.20. The regulatory authority shall specify that erosional features of lesser size be stabilized if they result in additional erosion and sedimentation.
- (e) Covering coal and acid-forming, toxic-forming, combustible, and other waste materials; stabilizing backfilled materials; and using waste material for fill. Any acid-forming, toxic-forming, combustible materials, or any other waste materials as identified by the regulatory authority that are exposed, used, or produced during underground mining and which are deposited on the land surface shall, after placement in accordance with §717.15 of this part, be covered with a minimum of 4 feet of nontoxic and noncombustible material; or, if necessary, treated to neutralize toxicity, in order to prevent water pollution and sustained combustion, and to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts, exposure by erosion, to provide an adequate depth for plant growth, or to otherwise meet local conditions, the regulatory authority shall specify thicker amount of cover using nontoxic material. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution or otherwise violate the provisions of §717.17 of this part.
- (f) Grading along the contour. All final grading, preparation of earth, rock and other nonwaste materials before replacement of topsoil, and placement of

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topsoil in accordance with §717.20, shall be done along the contour to minimize subsequent erosion and instability. If such grading, preparation or placement along the contour would be hazardous to equipment operators, grading, preparation or placement in a direction other than generally parallel to the contour may be used. In all cases, grading, preparation or placement shall be conducted in a manner which minimizes erosion and provides a surface for replacement of topsoil which will minimize slippage.

§717.15 Disposal of excess rock and earth materials on surface areas.

Excess rock and earth materials produced from an underground mine and not disposed in underground workings or used in backfilling and grading operations shall be placed in surface disposal areas in accordance with requirements of §715.15. Where the volume of such material is small and its chemical and physical characteristics do not pose a threat to either public safety or the environment, the regulatory authority may modify the requirements § 715.15 in accordance §717.14(a)(1).

§717.16 [Reserved]

§717.17 Protection of the hydrologic system.

The permittee shall plan and conduct underground coal mining and reclamation operations to minimize disturbance of the prevailing hydrologic balance in order to prevent long-term adverse changes in the hydrologic balance that could result from underground coal mining operations, both on and off site. changes in water quality and quantity, in the depth to ground water, and in the location of surface water drainage channels shall be minimized and applicable Federal and State statutes and regulations shall not be violated. The permittee shall conduct operations so as to minimize water pollution and shall, where necessary, use treatment methods to control water pollution. The permittee shall emphasize underground coal mining and reclamation practices that will prevent or minimize water pollution and changes in flows in preference to the use of water treatment facilities prior to discharge to surface waters. Practices to control and minimize pollution include, but are not limited to, diverting water from underground workings or preventing water contact with acid- or toxic-forming materials, and minimizing water contact time with waste materials, maintaining mine barriers to enhance postmining inundation and sealing, establishing disturbed areas through grading, diverting runoff, achieving quick growing stands of temporary vegetation, and lining drainage channels. If treatment is required to eliminate pollution of surface or ground waters, the permittee shall operate and maintain the necessary water treatment facilities as set forth in this section.

(a) Water quality standards and effluent limitations. (1) All surface drainage from the disturbed area, including disturbed areas that have been graded, seeded or planted and which remain subject to the requirements of this section, except for drainage from disturbed areas that have met the requirements of §717.20 shall be passed through a sedimentation pond or a series of sedimentation ponds prior to leaving the permit area. All waters which flow or are removed from underground operations or underground waters which are removed from other areas to facilitate mining and which discharge to surface waters must be passed through appropriate treatment facilities prior to discharge where necessary to meet effluent limitations.

(2) For purposes of this section only, disturbed areas shall include areas of surface operations but shall not include those areas in which only diversion ditches, sedimentation ponds, or roads are installed in accordance with this section and the upstream area is not otherwise disturbed by the permittee. Disturbed areas shall not include those surface areas overlying the underground working unless those areas are also disturbed by surface operations such as fill (disposal) areas, support facilities areas, or other major activities which create a risk of pollution.

(3) The regulatory authority may grant exemptions from this requirement only when the disturbed drainage